

Datasheet

Fetch – Bottom Pressure Recorder 8306-9930



Fetch is a long-life subsea sensor node that is fitted with an array of environmental sensors. The unit can either make readings on demand, or log sensor readings autonomously and offload logged data wirelessly.

The autonomous sampling regime can be configured wirelessly before deployment and via the acoustic modem which is also used to recover the data to the surface.

The 9,000 bps acoustic modem transfer rate enables data to be extracted in minimal time reducing operational costs and extending the operational endurance of the battery pack.

A Bluetooth link is available for deck testing and configuration.

The ultra-low power platform powers up sensors only when required and logs and timestamps the data to an internal SD memory card.

High-capacity primary lithium battery packs enable deployments of many years, dependent on sensor selection and sampling rate.

Fetch is compatible with Sonardyne's Ultra-Short BaseLine (USBL) positioning systems for positioning during deployment/recovery.

The Type 8306-9930 includes a high accuracy quartz pressure sensor. Other fitted sensors include a low-drift, high accuracy temperature sensor, high resolution inclinometer and direct read sound velocity sensor.

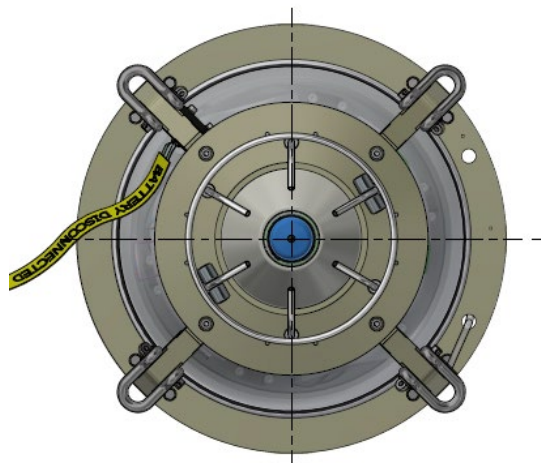
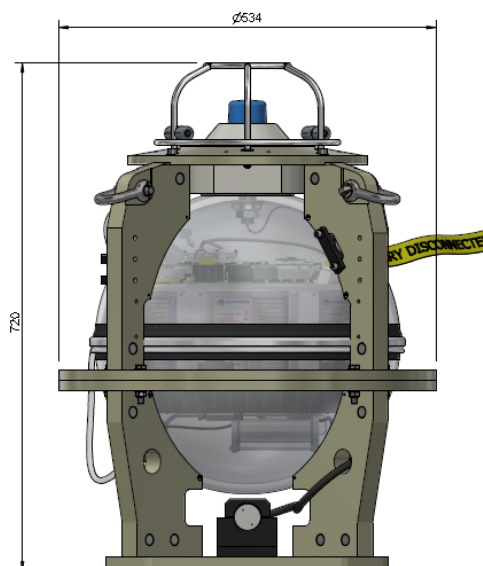
Fetch is compatible with Sonardyne's Wideband® acoustic positioning systems and can be boxed-in periodically as required.

Key Features

- High resolution pressure data
- Ultra long-life – 20-year design life with excellent corrosion resistance
- Sonardyne Wideband 2 and 2+ acoustic signal technology
- Integrated modem with data rates ranging from 100 to 9,000 bps in multiple frequency bands
- Easy to set-up
- Battery disconnect fob to disconnect battery for transport and storage
- Low-cost free-fall deployment option

Specifications

Fetch – Bottom Pressure Recorder 8306-9930



Feature		Type 8306-9930
Depth Rating		3,000 m
Operating Frequency		MF (19–34 kHz)
Transducer Beam Shape		Omni-directional $\pm 130^\circ$
Transmit Source Level (dB re 1 μ Pa @ 1 m)		193 dB
Receive Sensitivity (dB re 1 μ Pa)		<85 dB
Design Life		20 years
Communications	Acoustic modem	100 to 9,000 baud
	RS232 test port	2,400 to 115,200 baud
	Bluetooth	
Internal Battery		Lithium primary, 504 Ah
Mechanical Construction		Glass sphere, duplex stainless-steel guard, Polypropylene skeleton and titanium ports. SV connector, 8-way rubber moulded
Operating Temperature		-5 to +35°C
Storage Temperature (Without Batteries)		-5 to +35°C
Mass		55 kg (121 lb)
Weight in Water		0 N (neutral buoyancy)
Height		720 mm (28.3")
Diameter		534 mm (21.0")
Sensors and Options		
Pressure Sensor (Quartz, $\pm 0.01\%$)		Fitted, 300 bar
High Precision Temperature Sensor (Pt100, $\pm 0.015^\circ\text{C}$)		Fitted
Sound Velocity (External), ± 0.017 m/s accuracy, 100mm leg)		Fitted via External Connector
MEMS Inclinometer ($\pm 1^\circ$)		Fitted
Tripod stands		Several options available